

File No. 1200209R  
METHOD OF INCREASING OUTPUT OF POLY(VINYL CHLORIDE) COMPOUNDS  
BLENDED FROM DRY-BLENDED POWDERS

What is claimed is:

1. A method of increasing output of poly(vinyl chloride) compounds blended from dry-blended powders, comprising the steps of:
  - (a) selecting a conventional dry blend formulation of poly(vinyl chloride) compound that comprises at least one poly(vinyl chloride) polymer in powder form and additives;
  - (b) replacing, in that conventional dry blend formulation, one poly(vinyl chloride) polymer powder of a given Inherent Viscosity with a replacement poly(vinyl chloride) polymer powder having an Inherent Viscosity about 3 to 10 about 35 percent higher to provide a replacement dry blend formulation; and
  - (c) extruding the replacement dry blend formulation through a profile die at a speed of as much as about thirty percent (30%) faster than the extrusion speed for the conventional dry blend formulation.
- 15 2. The method of Claim 1, wherein the poly(vinyl chloride) is a homopolymer or a copolymer.
3. The method of Claim 1, wherein the replacement poly(vinyl chloride) polymer powder has an Inherent Viscosity of about 10% higher than the given 20 Inherent Viscosity.
4. The method of Claim 1, wherein the replacement poly(vinyl chloride) polymer powder has a particle size of from about 30  $\mu\text{m}$  to about 400  $\mu\text{m}$ .
- 25 5. The method of Claim 1, wherein the replacement poly(vinyl chloride) polymer powder has a particle size of from about 100  $\mu\text{m}$  to about 250  $\mu\text{m}$ .
6. The method of Claim 1, wherein the dry blend formulation further comprises an additive selected from the group consisting of processing aides,

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impact modifiers, titanium dioxide, inorganic fillers, pigments, lubricants, organic ultraviolet light screeners, and stabilizers.

7. The method of Claim 1, wherein extruding step (c) uses a single  
5 screw or twin-screw extruder with a single stage or multi-stage configuration.

8. The method of Claim 7, wherein the extruder is a twin-screw  
extruder with 5 zones and a L/D ratio of about 26:1.

10 9. An article made from dry-blended powder of a poly(vinyl chloride)  
compound according to the process of Claim 1.

10. A use of an extruded article made from dry-blended powder of a  
poly(vinyl chloride) compound according to the process of Claim 1.

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